

U. S. Department of Agriculture
Forest Service
CALIFORNIA FOREST EXPERIMENT STATION
Berkeley, California

August 1, 1935.

Technical Note
No. 4

WOOD CONSUMPTION AND SECONDARY WOOD-USING
INDUSTRIES OF CALIFORNIA

Consumption of lumber in California averaged about 3 billion board feet annually prior to the depression, but in 1932 lumber consumption dropped to about one and one-half billion board feet. Per capita lumber use had reached a peak of more than 1000 board feet in the year 1923 but steadily declined thereafter, falling to 670 board feet in 1928 and to 245 board feet in 1932. Average consumption of lumber during the decade 1920-1930 was about 750 board feet per capita, or two and a half times the average for the entire United States.

Although California sawmills produced about 2 billion board feet of lumber annually in the decade of the twenties, only about half of the lumber cut in California, or approximately a billion board feet, was consumed within the State. In addition to the annual consumption of about a billion board feet of California lumber, however, approximately 2 billion board feet of lumber were imported annually into California, largely from Oregon and Washington. Since California woods are particularly adapted to such specialty uses as millwork and interior trim and have been used mainly for such purposes, it has been necessary to import most of the lumber for construction. The suitability and low prices of Douglas fir, as well as the large volume of building in California during recent decades have resulted in heavy shipments of lumber from the Pacific Northwest. Small amounts of hardwood lumber were also received from Eastern states and from the Philippines.

The California lumber used outside the State was made up largely of the better grades of ponderosa pine, sugar pine, and redwood, and was absorbed for the most part by sash and door plants of the Mississippi valley. Of the California lumber consumed within the State, ponderosa and sugar pine were used largely for box shooks and millwork, while redwood and Douglas fir were used for both construction work and factory products.

The most important use for lumber in California has been in building construction. During the last 15 years nearly two-thirds of the annual consumption has gone into residential building, repairs, and non-residential construction. Box shooks as the next important use accounted for one-fourth of the lumber used, while factory products such as furniture and fixtures made up about 5 percent of the total consumption. Miscellaneous uses, as in public works, irrigation structures, and public utilities, accounted for the balance.

Lumber constitutes the most important wood commodity used in California, but considerable amounts of the so-called minor forest products are also consumed. It is estimated that about 85 million cubic feet of fuelwood are used each year, 11 million cubic feet of fence posts, and 15 million cubic feet of miscellaneous products. With the exception of paper and pulp, annual imports of which are equivalent to about 50 million cubic feet of timber, most of the minor products consumed in the State are cut in California forests.

With regard to future wood consumption in California, it appears that both total and per capita requirements are decreasing. Lumber consumption is declining in building construction, largely because the population of the State is becoming stabilized and the industrial plant is expanding more slowly. In addition to the passing of pioneer and boom conditions, changes in types of construction and the substitution of other materials for lumber are also reducing the consumption of wood. Although the amount of building in the future undoubtedly will decrease to more or less of a maintenance basis, it seems probable in the light of current trends that future consumption of lumber for box shock should not be materially less than at present.

Secondary Wood-Using Industries

In addition to the lumbering industries which manufacture lumber and minor products from logs, there are a considerable number of plants in the State which remanufacture lumber and veneer prior to its final consumption. These secondary wood-using industries, using lumber as a principal raw material, manufacture a wide variety of products, including box shock, millwork, furniture and fixtures, cooperage, caskets, and numerous miscellaneous items. With the exception of box factories, a large number of which are operated in conjunction with sawmills in the pine region of the State, most of these wood-using industries are concentrated in the metropolitan districts of the larger cities. Individual establishments vary in size from one-man shops to large industrial plants employing scores of men.

The total quantity of lumber and veneer remanufactured by the secondary wood-using industries of California amounted to about 550 million board feet in 1933, or slightly less than half the amount remanufactured in 1928. More than a third of the total lumber consumed in the State ordinarily is remanufactured by the wood-using industries prior to final use.

California woods are used for the most part by the wood-using industries, only one-seventh of the total lumber remanufactured in 1933, for example, coming from outside the State. Ponderosa pine is by far the most important species used, accounting for about 80 percent of the box shock and for a large part of the sash, doors, and millwork. Sugar pine is also remanufactured into boxes and millwork, while sizeable amounts of redwood lumber go into sash and doors, tanks, and caskets. Spruce is remanufactured largely into boxes and crates, while Douglas fir goes into

car construction, boxes, millwork, and shipbuilding. The hardwoods going into remanufactures are used almost entirely for furniture and fixtures.

Box factories are the most important of the wood-using industries, accounting for about two-thirds of the total lumber remanufactured. Box shook consumption also tends to be somewhat more stable than most other lumber uses because of the use of shook for fruit shipments from California to both state and national markets. Planing mills, which remanufacture lumber into sash, doors, and millwork, also constitute an important industry which accounted for about 12 percent of the 1933 remanufactures and for nearly a third of the 1928 remanufactures. The decline in building activity accompanying the depression, however, caused a considerable decrease in the production of planing-mill products, the output in 1933 amounting to only 20 percent of that in 1928.

Among the smaller remanufacturing industries, which account for about 14 percent of the lumber remanufactured, are those making use of lumber for car construction, furniture, fixtures, shipbuilding, coffins, and a considerable number of miscellaneous factory products. Lumber used in 1933 by these smaller industries amounted to about half the quantity remanufactured in 1928. As in the case of box shook and millwork, most of the miscellaneous remanufactures are marketed within California.

Employment in the secondary wood-using industries is of considerable importance to the State, the number of workers employed approximating that of the primary lumbering industries. Thus in 1929 the secondary industries employed 25,000 workers, while the sawmills employed about 23,500 workers. Wages and salaries amounted to about 44 million dollars in 1929, compared to 37 million dollars paid by the lumber industry in the same year. The secondary industries employed about 7 percent of all industrial workers in California in 1929, paid out more than 6 percent of industrial wages and salaries, and accounted for about 5 percent of the total value added by all manufacturing in the State.